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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,001	09/22/2003	Shinichiro Koto	243003US-2SRDCONT	4606
22850 7590 10/17/2008 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER HUBER, JEREMIAH C	
			ART UNIT	PAPER NUMBER
			2621	
			NOTIFICATION DATE	DELIVERY MODE
			10/17/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/665,001	Applicant(s) KOTO ET AL.	
	Examiner JEREMIAH C. HUBER	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29 and 30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 29 and 30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/21/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 29-30 are rejected under U.S.C. 103(a) as being unpatentable over Demos (6816552) in view of Nakaya (6295376).

In regard to claims 29-30 Demos discloses a method and apparatus (Demos generally Figs. 2-3 and cols. 1-5) including:

receiving encoded data including:

a first mode information for each macroblock indicating either a single or composite prediction mode (Demos col. 2 lines 16-30 note modes 1 and 2 for single prediction and mode 3 for composite prediction);

a second mode information for each frame indicating a average value or linear extrapolation/interpolation prediction (Demos Figs. 2-3 col. 4 lines 13-29, note for higher M values the frame position will indicate either averaging or interpolation, i.e. for M=4 with three B frames, the first B frame will use interpolation whereas the second, or middle, B frame will use averaging see figures for example layout with M=3); and

a predictive error signal (Demos, col. 1 lines 51-57 note only differences, or predictive errors, are used for P and B frames);

Demos further discloses predicting macroblocks using either single or composite prediction (Demos col. 2 lines 16-30) and using either average value and linear interpolation/extrapolation when composite prediction is used (Demos Figs. 2-3 col. 4 lines 13-29 note comments above). Demos also discloses decoding video data (Demos col. 1 lines 16-25). It is noted that Demos does not explicitly disclose a decoding structure. However decoding of encoded video was common and notoriously well known in the art at the time of the invention as is shown by Nakaya. Nakaya discloses a video decoder that generates predictive macroblocks using single or composite prediction (Nakaya Fig. 2 and col. 2 lines 47 to 67, also col. 7 lines 16-22 for composite averaging prediction) and generating decoded macroblocks by adding the predictive macroblock to the predictive error signal (Nakaya Fig. 2 207). It is therefore considered obvious that one of ordinary skill in the art would recognize the advantage of utilizing a decoding structure, like the one taught in Nakaya, in the invention of Demos in order to perform decoding. One would further expect Demos to utilize a decoder in order to present video data in an viewable format.

Response to Arguments

Applicant's arguments filed 7/2/2008 have been fully considered but they are not persuasive.

In response to the applicants arguments made in regard to claims 29 and 30 the applicant asserts that switching between average and linear interpolation cannot be executed by the M values of Demos. The applicant specifically asserts that changing the M value in Demos will alter the frame structure and increase the encoded bits and thus does not meet the claim limitations. The examiner must disagree. Initially, the applicant seems to misunderstand the examiner's basis for rejection. It is the examiner's belief that the invention of Demos with M equal to four meets the claim limitations without a change in the M value. In Demos, when M equals four a first B frame uses linear interpolation prediction, a second frame uses averaging prediction, and a third frame uses linear interpolation prediction again. Therefore the frame position itself determines the type of prediction to be used. Further, examiner also believes that a switching M implementation of Demos would also meet the claim limitations. The examiner notes that the claims do not recite any requirements for maintaining frame structure, switching between prediction types on a frame or group of frames basis, or a requirement to perform any type of prediction switching at all.

The applicant further asserts that the claims provide for changing between single and composite prediction on a macroblock basis. The examiner must disagree. The examiner notes that the claims require first mode information for each macroblock that indicates single or composite prediction. The claims do not require changing the

prediction type on a macroblock basis. Further, Demos discloses determining single or composite prediction for each block of a B frame (Demos col. 2 lines 54-65). Therefore the examiner believes that Demos would properly meet this claim limitation even if it appeared in the claim.

The examiner thanks the applicant for the thorough discussion of the invention on pages six to nine of the Remarks. The comments are enlightening, and helpful in understanding the invention but, they do not point out any other perceived deficiencies in the rejection under Demos in view of Nakaya. Therefore these statements are not considered to be persuasive in overcoming the rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEREMIAH C. HUBER whose telephone number is (571)272-5248. The examiner can normally be reached on Mon-Fri 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571)272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jeremiah C Huber
Examiner
Art Unit 2621

Application/Control Number:
10/665,001
Art Unit: 2621

Page 7

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Examiner, Art Unit 2621

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